

ELECTROTHERMAL ATOMIC ABSORPTION SPECTROMETRIC METHOD SM 18 th /19 th Ed. 3113 B					
Facility Name: _____ VELAP ID _____					
Assessor Name: _____ Analyst Name: _____ Inspection Date _____					
Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Records Examined: SOP Number/ Revision/ Date _____ Analyst: _____					
Sample ID: _____ Date of Sample Preparation: _____ Date of Analysis: _____					
Was water used for reagents and standards metal-free?	3.a				
Was seawater or brine prepared by passing through a chelating resin to remove trace metals?	3.g				
Was all glassware rinsed with 1+1 HNO ₃ and water?	4.a				
If trace aluminum was analyzed, were polypropylene or TFE digestion utensils used?	4.a.				
If dissolved metals were analyzed, were the blank and samples filtered through a pre-washed 0.4 to 0.45 µm filter according to 3030B?	4.a.1				
If dissolved selenium or arsenic were analyzed, were 3 mL of 30% hydrogen peroxide and an appropriate concentration of nickel nitrate solution added to 100 mL of sample?	4.a.1				
If total recoverable arsenic and selenium were analyzed, were 1 mL HNO ₃ and 2 mL 30 H ₂ O ₂ added per 100 mL sample prior to boiling and returning to volume with water?	4.a.3				
Were a blank and at least three calibration standards prepared fresh daily?	4.c				
Were standard solutions injected in order of increasing concentration and analyzed in triplicate?	4.c				
Was a blank analyzed with every batch and carried through all of the procedural steps, and were the results below the method detection limit or LOD?	3020 Quality Control				
Were external known standards, a sample replicate, and a sample spike analyzed with each run?	3020 Quality Control				
Were control charts of spikes maintained?	3020 Quality Control				
Notes/Comments:					

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Were midpoint check standards and calibration blanks analyzed at the beginning, after each set of nine unknown samples, and at the end of runs?	3020 Quality Control				
Did midpoint check standards have a recoveries of 90 to 110%	3020 Quality Control				
Did external source solutions agree with expected values by $\pm 5\%$?	3020 Quality Control				
Did spikes have recoveries of 85 to 115%?	3020 Quality Control				
Were all samples (except those demonstrated to be free of matrix interferences) analyzed using the method of standard additions?	4.d				
Were all samples analyzed at least in duplicate or until reproducible results were obtained, and the replicate values averaged? (Variation should be $\leq 10\%$.)	4.d				

Notes/Comments: